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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Jorn Borgert

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

GUPTA, VANI

ART UNIT

PAPER NUMBER

3768

MAIL DATE

DELIVERY MODE

06/16/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/597,980	Applicant(s) BORGERT ET AL.	
	Examiner VANI GUPTA	Art Unit 3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. *Claims 1 - 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melkent et al. (US Patent No. 6,725,080 B2) in view of Gordon (US Patent No. 5,938,645).*

Regarding claims 1 – 3, Melkent et al. (Melkent) discloses an apparatus “for facilitating the combined (in other words, simultaneous) positioning and orientation of multiple surgical implements” (Abstract). That is, there are multiple objects that are tracked by the tracking system, and each object comprises tracking markers for the tracking system to track (col. 5, line 22 – col. 6, line 13), including the first active localizer indicating a spatial position of the portion of the first catheter element; and a second catheter element with at least a second active localizer corresponding to a portion of the second catheter element, the second active localizer indicating a spatial position of the portion of the second catheter element (col. 5, ll. 40 – 41; and col. 7, ll. 64 – 65). Melkent also explains that the position and orientation of a particular part of the object may be determined (col. 10, ll. 55 – 60).

Melkent differs from claims 1 – 3 in that Melkent does not disclose specifically that the multiple objects being tracked by the tracking system are a first catheter element and a second catheter element.

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Nonetheless, *Gordon* describes a first catheter element comprising a catheter, and a second catheter element comprising a guide wire, wherein the catheter *can be slipped over the guide wire* and follow the guide wire through the bends of a blood vessel (*col. 2, ll. 50 – 63*).

It would be prima facie obvious to modify Melkent with *Gordon* so that one could properly position the two catheter elements with respect to each other in small tortuous places such as blood vessels.

Regarding Claim 4, Melkent suggests that at least one of the localizers is capable of being a magnetic field sensor in an external magnetic field for determining the spatial position (*col. 5, ll. 41 - 46*).

Regarding Claim 5, Melkent suggests that at least one of the localizers contains a source for electromagnetic or acoustic radiation (*col. 5, line 41 – 55*).

Regarding claims 6 and 11, Examiner interprets “wherein the localizers are arranged at a distance of less than 10 cm from each other during use of the catheter system” to mean that when the catheter is slipped over the guide wire, the two catheter elements are situated in close proximity to each other. *Gordon* explains a control mechanism that controls the positioning of the two elements (less than 10 inches) relative to each other (*Gordon: col. 6, ll. 39 - 45*). It would be prima facie obvious to modify Melkent in view of *Gordon* to also arrange the localizers at a distance of less than 5 cm from each other during use of the catheter system to provide a tighter control over the positioning of the catheter elements with respect to each other.

Regarding claims 7 and 8, Melkent in view of *Gordon* suggests a method for navigation of a catheter system in a vascular system, wherein the catheter system contains a first and a second catheter element, which are coupled to each other such that they can slide with respect to

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each other and carry at least a first or second active localizer respectively (*see rejection of claims 1 - 3*).

Melkent in view of Gordon also teaches determining a spatial position of the first active localizer relative to the vascular system (*Gordon: col. 8, ll. 44 - 45*); and determining a spatial position of the second active localizer relative to the spatial position of the first active localizer, wherein the determining steps are performed substantially simultaneously (*Melkent: col. 7, ll. 15 - 21 and ll. 60 - 64*).

Regarding claim 9, Melkent in view of Gordon suggests the spatial position of the first active localizer relative to the vascular system is determined based on an image of the vascular system (*Melkent: col. 8, ll. 19 - 42*).

Response to Arguments

2. Applicant's arguments filed March 23, 2010 have been fully considered but are not persuasive.

As discussed in the above rejection of Claim 1, Melkent discloses an apparatus “for facilitating the combined (in other words, simultaneous) positioning and orientation of multiple surgical implements” (*Abstract*), comprising the localization elements or tracking markers for “each tracked object” used by the system (*col. 5, ll. 40 - 41*).

As Applicant has surmised, Gordon is utilized for the teachings of the two catheter elements - a catheter and catheter guidewire - that may be used in conjunction with the tracking system of Melkent.

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Therefore, as also indicated above, Melkent in view of Gordon suggests a first catheter element with a first active localizer or marker indicating a spatial position of the portion of the first catheter element; and a second catheter element with at least a second active localizer or marker indicating a spatial position of the portion of the second catheter element (*col. 5, ll. 40 – 41; and col. 7, ll. 64 – 65*)

With respect to “the first and the second catheter element are slidably coupled,” Applicant should note that this refers to intended use of the catheter elements. Nonetheless, Gordon explains that the first catheter element comprising a catheter and the second catheter element comprising a guide wire can be coupled such that the catheter *can be slipped over the guide wire*. Therefore, the two elements are *slidably coupled* (*col. 2, ll. 50 – 63*).

With respect to “the first and second active localizers simultaneously indicate the spatial positions of the portions of the first and second catheter elements,” Applicant should note that this is a merely a functional feature of the active localizers, and does not further limit the *structure* of the present apparatus. Nonetheless, Melkent's markers are capable of performing this function as explained above. That is, Melkent “facilitates the combined (in other words, simultaneous) positioning and orientation of multiple surgical implements” (*Abstract*). This applies to arguments about Claim 7 as well.

Therefore, all present claims stand rejected as indicated above.

Conclusion

3. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VANI GUPTA whose telephone number is (571)270-5042. The examiner can normally be reached on Monday - Thursday (8:30 am - 6:00 pm; EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. G./
Examiner, Art Unit 3768

/Long V Le/
Supervisory Patent Examiner, Art Unit 3768